

BERNEIL WASH
FCD GAGE ID# 59207 (4688)

STATION DESCRIPTION

LOCATION – The gage is located two blocks south of Doubletree Road at the approximate 66th Street alignment, in the town of Paradise Valley. Access is gained from 66th Place from a service road on the south side of the first house on the southwest corner of Doubletree and 66th Place. Latitude N 33° 33' 59"; Longitude W 111° 56' 16". Located in the NE1/4 NW1/4 of S34 T3N R4E of the Paradise Valley 7.5-minute USGS quadrangle.

DRAINAGE AREA – about 6.9 square miles, via USGS Streamstats.

ESTABLISHED – July 30, 1998

GAGE – The gage is a pressure transducer type located on the left bank of the channel. The PT is at 0.00 feet gage height.

There is no staff gage at this site.

There is no crest stage gage at this site.

ZERO GAGE HEIGHT – Zero gage height is defined as the ground at the transducer gage on the left toe of the channel. It is equivalent to 1,314.560 feet NAVD88, levels of February 28, 2019.

HISTORY – Gaging established on July 30, 1998. No previous gaging at this location.

REFERENCE MARKS –

RM-BERNEIL is an FCDMC brass cap located on the left bank downstream of the station tube. It is at elevation 7.098 feet gage height and 1,321.658 feet NAVD88, levels of February 28, 2019.

RM-1 is a rebar on top of the left bank in the gage cross section. It is at elevation 8.497 feet gage height and 1,323.057 feet NAVD88, levels of February 28, 2019.

RM-2 is a rebar on top of the right bank in the gage cross section. It is at elevation 6.799 feet gage height and 1,321.359 feet NAVD88, levels of February 28, 2019.

RP-1 is a chiseled 'X' on the curb east of the left bank service road about 30 feet northeast of the tube. It is at elevation 8.296 feet gage height, levels of February 28, 2019.

RP-2 is the ground at the transducer gage as found on the date of the survey. It is at elevation 0.000 feet gage height, levels of February 28, 2019.

CHANNEL AND CONTROL – The channel is a gunnite lined trapezoidal channel of relative uniformity. The channel is the control for all stages.

RATING – The current rating is Rating #2 and was developed from surveyed cross sections taken in October 2018. The rating is a slight modification to the previous rating. There were no significant changes to the channel, and thus no significant changes to the rating.

DISCHARGE MEASUREMENTS – None made to date. Low flow measurements could be made by wading the channel. High flows are not feasible at the Doubletree Road bridge because of energy dissipaters at the bridge. An indirect measurement is possible in the same reach as the gage, assuming high water marks are present.

POINT OF ZERO FLOW - Approximately 0.00 feet gage height. The channel bottom is sprayed concrete and is not smooth. The PZF could vary by 0.05 feet or so.

FLOODS – The peak discharge recorded to date was 1,634 cfs at 3.50 feet gage height on October 2, 2018.

REGULATION - None known

DIVERSIONS - None known

ACCURACY – Fair

JUSTIFICATION – Monitor flows into Indian Bend Wash for flood warning in the city of Scottsdale.

UPDATED – March 26, 2019
 DE Gardner